Watershed & Water Quality Modeling Technical Support Center

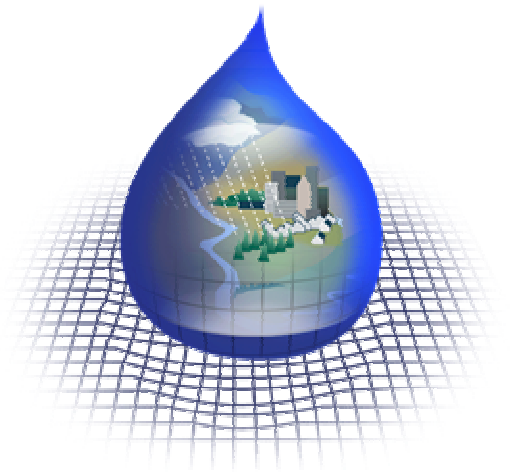
What is the Technical Support Center?

The mission of the Watershed and Water Quality Modeling Technical Support Center is to provide assistance to EPA Regions, State, and Local Governments, and their contractors in the implementation of the Clean Water Act. The Center which is part of EPA's Office of Research and Development (ORD) is committed to providing access to technically defensible tools and approaches that can be used in the development of Total Maximum Daily Loads (TMDL), waste load allocations, and watershed protection plans.

What kind of Technical Support?

The Center is committed to providing assistance and technical support:

- **Review of proposed TMDLs** – provide a technical review and comments for proposed or pre-proposed TMDLs
- **Task Order Manager** – Act as Task Order Manager for the National Watershed Contract, providing technical oversight to ensure consistency and quality in the approaches taken to develop TMDLs
- **Technical Advisory Group** – Center staff will participate as technical advisors
- **Model Application** – take the lead in the application of models used in the development of TMDLs, implementation, waste load allocation
- **Data Analysis** – provide assistance in data acquisition and analysis
- **Post TMDL Implementation** – provide assistance in the development of TMDL implementation
- **Best Management Practice Analysis** – provide assistance in the selection and placement of BMP's in the watershed
- **Research** to develop and improve models for regulatory applications



EPA United States Environmental Protection Agency

Visit the
Watershed & Water Quality Modeling
Technical Support Center Website
http://www.epa.gov/athens/wwqtsc/index.html

ORD US EPA Office of Research & Development

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What Tools are Available?

The Center provides access to a wide variety of tools and mathematical models that can be used to support the development of TMDLs, waste load allocations, and watershed protection plans. Most of the tools presented here are actively being developed to serve the needs of the regulatory community better. Most of these tools have been enhanced to meet the needs of the TMDL program.

Watershed Models

Watershed models play an important role in linking sources of pollutants to receiving waterbodies as nonpoint source loads. Watershed models are driven by precipitation, landuse, impervious areas, slope, soil types and drainage area. GIS programs like BASINS and WCS provide the data that are needed for watershed models to predict both water and pollutant runoff from a watershed.

- Better Assessment Science Integrating Point and Nonpoint Sources (BASINS)
- Watershed Characterization System (WCS)
- Hydrologic Simulation Program (HSPF)
- Loading Simulation Program (LSPC)
- Watershed Assessment Model (WAMView)
- Stormwater Management Model (SWWM)

Hydrodynamic & Water Quality Models

Hydrodynamic and water quality models integrate inputs from point and nonpoint sources to determine impacts on water quality in receiving waterbodies. These models allow scientists and engineers to determine assimilative capacities of the waterbody, determine level of best management practices, or predict the time required for a system to recover after being altered.

- Water Quality Analysis Simulation Program (WASP)
- Environmental Fluid Dynamics Code (EFDC)
- Stream Water Quality Model (QUAL2K)
- A Dynamic One Dimensional Hydrodynamic & Water Quality Model (EPD-RIV1)

Training

Training provided by the Center will consist of regularly scheduled training modules throughout the country, self-paced training available on the web, and specialty conferences. Materials from these training modules will be available at the Center's homepage.

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